



4-246-022-21
030227AMI-H-FM

Micro Hi-Fi Component System

XR-MN5

OPERATING INSTRUCTIONS

En (English)

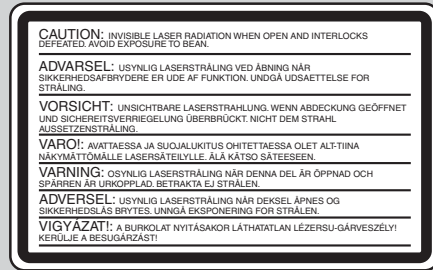
COMPACT
disc
DIGITAL AUDIO



PRECAUTIONS

WARNING

The following caution label is located inside the apparatus.



To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.



Don't throw away the battery with general house waste, dispose of it correctly as chemical waste.

On operating voltage

Before operating the system, check that the operating voltage of your system is identical with the voltage of your local power supply.

On safety

- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the component, unplug the stereo system and have the component checked by qualified personnel before operating it any further.
- The AC power cord must be changed only at a qualified service shop.

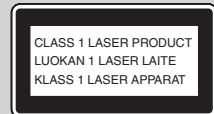
On placement

- The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm clearance from the rear and the top of the unit, and 5 cm from each side.
- Do not place the unit in an inclined position.
- Do not place the unit in locations where it is;
 - Extremely hot or cold
 - Dusty or dirty
 - Very humid
 - Vibrating
 - Subject to direct sunlight.

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.



This appliance is classified as a CLASS 1 LASER product.

This label is located on the rear exterior.

On heat buildup

- Although the unit heats up during operation, this is not malfunction.
- Place the unit in a location with adequate ventilation to prevent heat build-up in the unit.

If you continuously use this unit at a large volume, the cabinet temperature of the top, side and bottom rises considerable. To avoid burning yourself, do not touch the cabinet.

On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD player. Should this occur, the system will not operate properly. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.
- When you move the system, take out any discs.

Notes on discs

- Playable discs on this unit are Audio CDs (CDs), CD-R/CD-RW with audio data (CD-R/RW) and CD-R/CD-RW with MP3 files (MP3-CDs).
- Discs recorded on CD-R/RW drives may not be played back because of scratches, dirt., recording condition or the drive's characteristics.
- CD-R/RW discs which are not finalized at the end of recording cannot be played back.
- Do not attach adhesive label, etc. to either side of a CD-R/RW disc, as doing so may cause malfunction.
- Do not load an unrecorded CD-R/RW disc. The disc may be damaged.
- Do not insert 8-cm (3-inch) discs. Those discs cannot be played on this unit. Moreover, if you insert the discs of that size forcibly, you may not be able to eject it.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
- DVD, SACD, CD-ROM and VCD cannot be played on this unit.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

If you have any questions or problems concerning your stereo system, please consult your nearest Aiwa dealer.

TABLE OF CONTENTS

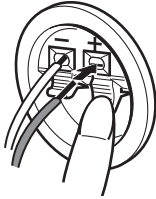
PRECAUTIONS	2
PREPARATIONS	4
PARTS AND CONTROLS	5
ADJUSTMENTS BEFORE OPERATION	8
SOUND ADJUSTMENTS	9
CD OPERATIONS	10
MP3-CD OPERATIONS	12
TUNER OPERATIONS	14
TAPE PLAYBACK	17
TAPE RECORDING	18
TIMER OPERATIONS	21
REFERENCE	23

PREPARATIONS

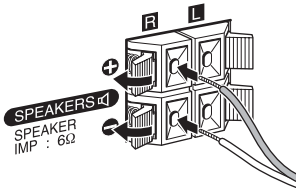
Connection

Plug in the AC power cord to the AC power socket after all other connections are made.

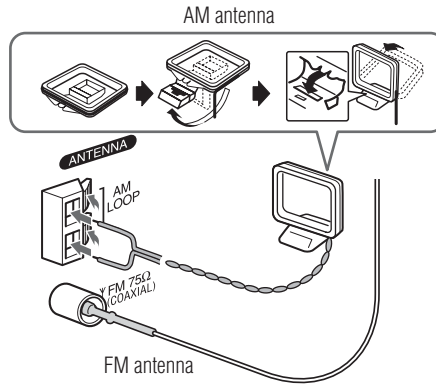
- 1 Connect the speaker cords to the speakers.
Connect the copper cords to the + terminals and the silver cords to the - terminals.



- 2 Connect the speakers to the main unit.
Connect the right speaker to the SPEAKERS R terminals and the left to the SPEAKERS L terminals. The copper cords go to the + terminals.



- 3 Connect the supplied antennas.
Connect the FM antenna to the FM 75 Ω terminal and the AM antenna to the AM LOOP jack.



- 4 Connect the AC power cord to an AC power socket.

When the AC power cord is connected to a wall outlet for the first time, DEMO appears in the display.
To deactivate the DEMO, press ECO/RDS or i-Bass/DEMO.

Speakers

- Do not short-circuit the + and - speaker cord leads.
- Do not leave objects generating magnetism or objects affected by magnetism near the speakers.

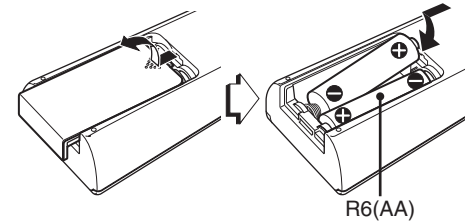
Antennas

Keep antennas away from metallic objects, electrical equipment and cords.

- **FM antenna:** Extend fully and position for the best reception. If reception is poor, connect an optional outdoor antenna to the FM 75 Ω terminal. Note that, when connecting an optional outdoor antenna, use an adaptor as required.
- **AM antenna:** Rotate to find best reception.

Remote commander

Detach the battery compartment lid at the rear of the remote commander and insert two R6 (size AA) batteries with correct polarity.

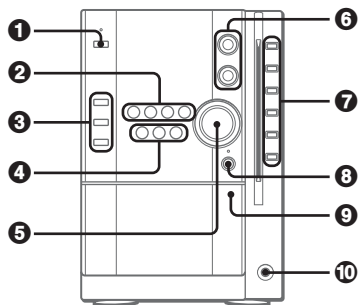


- Replace the batteries with new ones when the operational distance between the remote commander and main unit becomes shorter.
- Remove the batteries if the unit is not going to be used for an extended period of time.
- The remote commander may not operate if it is used under intense sunlight or if its line of sight is obstructed.

PARTS AND CONTROLS

Main unit: front

Refer to the pages indicated in parentheses for details.



1 POWER \odot STANDBY/ON (8)

Switches the unit on and off (standby).

2 \blacktriangleright ||CD (8, 10-12)

Starts and pauses CD play.

TUNER/BAND (8, 14)

Selects tuner function and the tuner band.

\blacktriangleleft \blacktriangleright TAPE (REC MUTING) (8, 17, 19)

Starts playback and changes the playback side.

Also used to enter 4-second blank spaces during recording.

AUX (8)

Selects the function of external equipment connected to AUX IN jacks.

3 ECO/RDS (8, 14-16)

Sets the ECO mode on or off.
Tuner: Activates RDS features.

SYNCHRO REC (18)

Starts recording and CD play simultaneously.

REC START/REC PAUSE (18-20)

Starts and pauses recording.

4 \blacksquare (10-12, 17, 18, 20)

CD and Tape: stops playback.
Tuner: clears a preset station.

TUNING \blacktriangleleft \blacktriangleright /I \blacktriangleleft \blacktriangleright , \blacktriangleleft \blacktriangleright /I \blacktriangleleft \blacktriangleright (8, 10-12, 14, 17, 21, 22)

CD: skips to a previous or a succeeding track when pressed, searches a track in fast forward or reverse playback when held down.

Tape: rewinds or fast forwards the tape.

Tuner: manually tunes up or down within the band.

5 VOLUME (9)

Adjusts the volume.

6 TREBLE (9)

Adjusts the treble level.

BASS (9)

Adjusts the bass level.

7 \blacktriangle CD EJECT (10, 12)

Ejects the disc(s).

CD slot buttons (1-5) (8, 10-12)

Selects a disc slot.

Starts CD play for one desired disc.

8 i-Bass/DEMO (4, 9)

Produces rich and clear low frequency sound.
Switches DEMO on and off while the unit is turned off.

9 PUSH EJECT \blacktriangle (17-19)

Opens or closes the cassette holder.

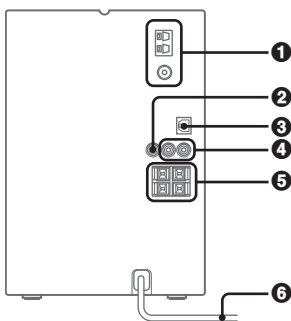
10 PHONES jack

Plug in optional headphones set with a stereo mini plug (\varnothing 3.5 mm). Speaker output is cancelled.

En

Main unit: rear

Refer to the pages indicated in parentheses for details.



1 AM LOOP jack and FM 75 Ω terminal (4)

Plug in the supplied AM and FM antennas.

2 SUB WOOFER jack

Connect optional powered sub woofer with a built-in amplifier to the jack.

3 DIGITAL OUT (OPTICAL) jack

CD digital sound signals can be output through this jack. Use an optical cable to connect digital audio equipment. Fit an optical cable plug in the DIGITAL OUT (OPTICAL) jack and push it to connect.

4 AUX IN jacks

Accept analogue sound signals from external equipment. Connect external equipment using an optional connecting cable with RCA phono plugs (red plug to R jack, white plug to L jack). Refer also to the operating instructions for your equipment.

To switch function to external input, press AUX.

To change a source name in the display of the AUX function.

Hold down AUX and press POWER while the power is on.



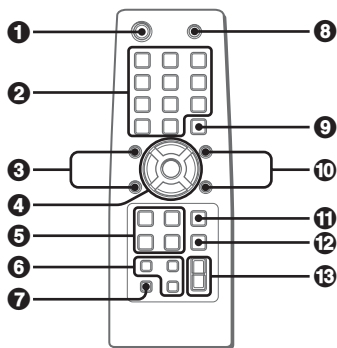
5 SPEAKERS terminals (4)

Connect the speaker cords of the supplied speakers.

6 AC power cord (4)

Remote commander

Refer to the pages indicated in parentheses for details.



Buttons with the same or similar names on the main unit basically have the same function.

❶ POWER (8)

❷ 1-10/0, >10 (10-12, 15, 19, 20)

CD: selects a track of the specified number.

Tuner: tunes in the station with the specified preset number.

The numbered buttons take on these functions when pressed with *SHIFT* held down:

CLOCK (8)

Selects clock mode.

TIMER (21, 22)

Selects timer mode.

MUTING (9)

To turn off the sound temporarily.

TUNER MODE (15)

Switches between stereo or monaural FM reception.

REV MODE (17, 18, 22)

Selects a reverse mode.

DISC/ALBUM (12)

Selects disc mode or album mode on an MP3-CD.

CD EDIT/CHECK (19, 20)

Selects edited CD recording.

❸ SHUFFLE/PROGRAM (11)

Selects shuffle or programmed CD playback mode.

REPEAT (11)

Selects repeat CD playback mode.

❹ ALBUM/PRESET \wedge , \vee (12, 15)

MP3-CD: Skips to a previous or succeeding album.

Tuner: Tunes in a preset station.

\lll / \lll , \ggg / \ggg (8, 10-12, 14, 17, 21, 22)

ENTER (8, 14, 15, 21, 22)

Determines the mode.

Stores the received station to preset.

❺ \blacktriangleright CD (8, 10-12)

TUNER/BAND (8, 14)

\blacktriangleleft TAPE (8, 17)

AUX (8)

❻ DISPLAY (10, 12)

Changes the display in CD playback mode.

DIMMER (8)

Adjusts the display window brightness.

SLEEP (21)

Selects sleep-timer mode.

❼ SHIFT

Hold down when pressing a numbered button to change its function to that printed above the number.

❽ DISC SELECT (10, 12)

Selects a desired CD slot.

❾ CLEAR (11, 15, 21, 22)

CD: Clears a CD program

Tuner: Clears a preset station.

❿ i-Bass (9)

TONE (9)

Selects the bass or treble adjusting mode.

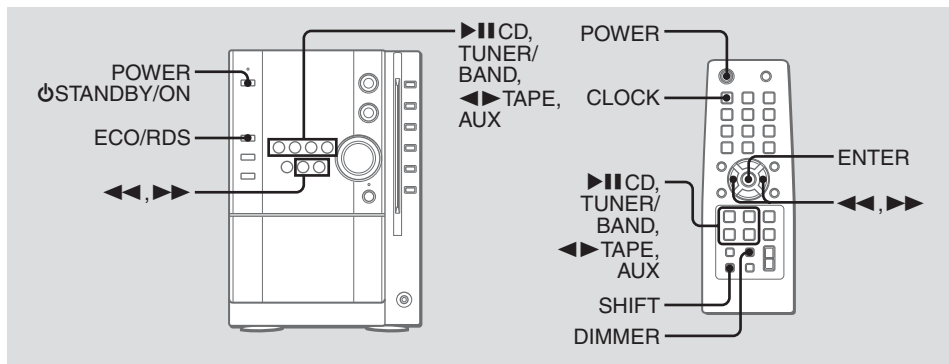
⓫ \blacksquare (10-12, 17, 18, 20)

⓬ FUNCTION (18-20)

Switches the active function among TAPE, TUNER, AUX (VIDEO or TV) and CD.

⓭ VOLUME \pm , $-$ (9)

ADJUSTMENTS BEFORE OPERATION



En

Power

Turning the unit on

Press **POWER** **STANDBY/ON** (POWER on the remote). Alternatively, press **TAPE, TUNER/BAND, AUX**, **CD** or one of the CD slot buttons (1-5). Playback will start automatically if a disc or tape is loaded.

Turning the unit off

Press **POWER** **STANDBY/ON** again. The unit goes into standby.

Dimmer

The display window brightness can be selected.

Press **DIMMER** on the remote.

Each press of the button changes between darker and brighter.

ECO mode

Reduces power consumption in standby mode with the following operations.

Press **ECO/RDS**.

Each press of the button changes the mode as follows;

ECO ON: Power economizing mode is activated.

When the unit turns off, everything on the display clears and only the red indicator above **POWER** lights to show that the power is being supplied.

ECO OFF: Power economizing mode is cancelled.

When the unit turns off, the clock display appears.

Initial mode is **ECO OFF**.

Standby power consumption

ECO ON: 0.26 W

ECO OFF: 15 W

Setting the clock

- 1 In stop mode, hold down **SHIFT** and press **CLOCK** on the remote. Go to step 3 when the hour of the clock display flashes.
- 2 Within 6 seconds, press **ENTER**. The hour flashes in the display.
- 3 Press **LEFT** or **RIGHT** to set the hour, then press **ENTER**.
- 4 Press **LEFT** or **RIGHT** to set the minute. Each press changes the time in 1-minute steps.
- 5 Press **ENTER**. The time display stops flashing and the clock starts from 00 seconds.

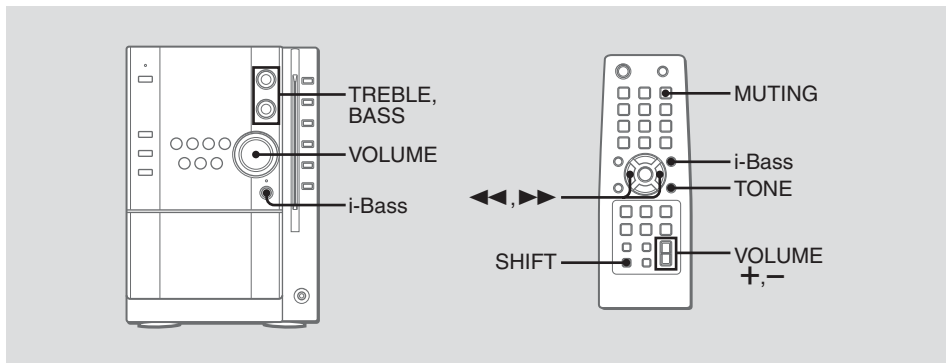
To display the time while the power is on

Hold down **SHIFT** and press **CLOCK** on the remote. The time will be displayed for 6 seconds.

If " -: -" appears when the unit is turned off

There has been a power interruption. Reset the clock.

SOUND ADJUSTMENTS



Volume

Turn VOLUME (press VOLUME +, - on the remote).
Adjust from 0 (minimum) to 33 and MAX (maximum).

Muting

Hold down SHIFT and press MUTING on the remote.
Playback continues without sound and "MUTING" appears
in the display.

To cancel the Muting, repeat the above or turn up the volume.

Bass and treble

Turn BASS or TREBLE.

When using the remote, press TONE repeatedly to select the
bass or treble, then press ◀◀ or ▶▶ within 6 seconds.
Each level can be adjusted from "-5" to "+5".

- If the sound becomes distorted, lower the level.

i-Bass

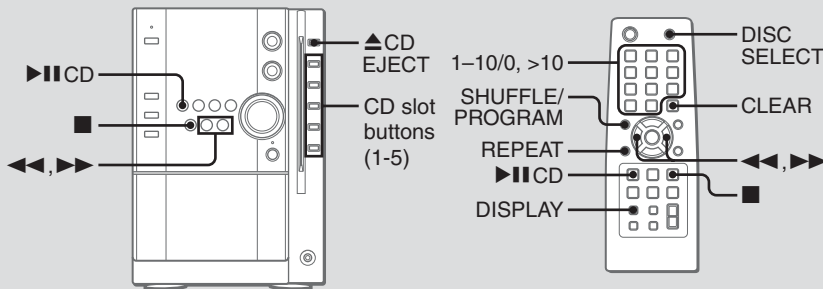
Produces rich and clear low frequency sound besides BASS effect.

Press i-Bass/DEMO (i-Bass on the remote).

Each press of the button changes the following four levels:
"i-Bass OFF", "i-Bass 1", "i-Bass 2" and "i-Bass
MAX".

- During recording, you cannot activate or deactivate i-Bass.

CD OPERATIONS



En

Notes

- **Do not insert 8-cm (3-inch) discs.** Those discs cannot be played on this unit. Moreover, if you insert the disc of that size forcibly, you may not be able to eject it.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
- Do not attach adhesive label to either side CD-R/RW discs, as doing so may cause malfunction.
- Do not insert more than one disc into one disc slot.

Playback

This unit plays back finalized CD-R/RW discs as well as audio CDs.

1 Press CD and load disc(s).

Press the CD slot buttons (1-5) and insert a disc with the labeled side right.

To insert more discs, press CD slot buttons (1-5) so that the slot changes, then insert a disc.

After reading the loaded disc, "CD" lights up at the corresponding disc number (1-5) in the display.

Do not insert a disc forcibly.

2 To play all discs, press ►► CD.

To play one desired disc, press the desired CD slot buttons (1-5).

Playback starts from the first track and the elapsed playback time is displayed.

To insert discs consecutively

You can insert discs consecutively at one time.

- 1 Hold down ▲ CD EJECT on the main unit for 2 seconds. When no disc is inserted, "ALL INSERT" will be displayed.

When the disc(s) already inserted, "ALL EJECT" will be displayed and the unit will eject the disc(s) consecutively.

- 2 Insert a disc consecutively when "CD No Disc" is displayed.

Do not insert a disc forcibly.

To stop playback

Press ■.

To pause playback

Press ►► CD. Press again to resume playback.

To select a track

Press <<< or >>> repeatedly.

To search (playback in fast forward or fast reverse)

Hold down <<< or >>>. Release at the desired point.

To select a disc and a track on the remote

To select a disc

Press DISC SELECT, then press the numbered button (1-5) within 6 seconds.

To select a track

Press the numbered buttons in the following way.

- To select 10th track, press 10/0.
- To select 25th track, press >10, 2 and 5.
- To select 30th track, press >10, 3 and 10/0.

Auto resume playback

When you change the function from CD to another one, or turn the unit off, CD playback is interrupted.

The next time you set the function to CD, the track you interrupted playback will automatically start play from its beginning.

To display the remaining playback time

Press DISPLAY on the remote during playback.

The display changes in the following order.

- ▶ Track number being played and elapsed playing time.
- ▶ Remaining time of current track.
- ▶ Remaining time of current disc*

* During programmed playback, remaining time of program playback is displayed.

* During program playback for plural discs, the remaining time is not displayed.

* During shuffle playback for all discs, the remaining time is not displayed.

To eject the disc

Press the desired CD slot buttons (1-5) to select the disc, then press ▲ CD EJECT.

Shuffle play

In shuffle play mode the unit plays all the tracks on the disc inserted in random order.

- 1 In stop mode, press SHUFFLE/PROGRAM on the remote repeatedly until the "SHUF" indicator is displayed.
- 2 Press ►|| CD to start play.

To cancel shuffle play

In stop mode, press SHUFFLE/PROGRAM on the remote repeatedly until the "SHUF" indicator disappears.

Repeat play

In repeat play mode the unit repeatedly plays all the tracks or the current track being played on the discs.

Press REPEAT on the remote repeatedly.

The mode changes as follows:

- "↶": Plays all the tracks repeatedly. (up to 5 times)
To play one desired disc, press the desired CD slot button (1-5).
To play all the discs, press ►|| CD.
- "↶ 1": Plays one track repeatedly. Select the track with ◀◀ or ▶▶.

To cancel repeat play

Press REPEAT on the remote repeatedly until "↶" and "↶ 1" disappears.

Programmed play

Plays back up to 30 selected tracks in programmed order.

- 1 In stop mode, press SHUFFLE/PROGRAM on the remote repeatedly until the "PGM" indicator is displayed.
- 2 Press DISC SELECT on the remote, then press the numbered buttons (1-5) to select a disc.
Go to the next step when "CD CHANGE" disappears.
- 3 Press the numbered buttons on the remote to program a track.
The selected track number lights up on the display.
To select the 10th track, press 10/0.
To select the 20th track, press >10, 2 and 10/0.
To select the 35th track, press >10, 3 and 5.
You can select a track by pressing ◀◀ or ▶▶ and then press ENTER.
- 4 Repeat step 2 and 3 to program other tracks.
- 5 Press ►|| CD.

- During programmed playback, you cannot select a disc or a track with the numbered buttons.
- If the total playback time of the program exceeds 99:59 minutes, or if a track with a track number exceeding 30 is programmed, the playing time is displayed as "--:--".
- You cannot program more than 30 tracks. "Full" is displayed.

To clear a previous track

Press CLEAR on the remote. Each time you press the button, a track is cleared from the end of the program.

To clear the entire program

Press ■ in stop mode.

To add a track to the program

Repeat steps 2 and 3 before starting playback. The track is added to the end of the program.

To cancel programmed play

Press SHUFFLE/PROGRAM repeatedly until "PGM" disappears.

- The program content is retained even if the program cancelled or after programmed playback finishes. The same program plays back if you carry out step 1 and 5.

When transporting the unit

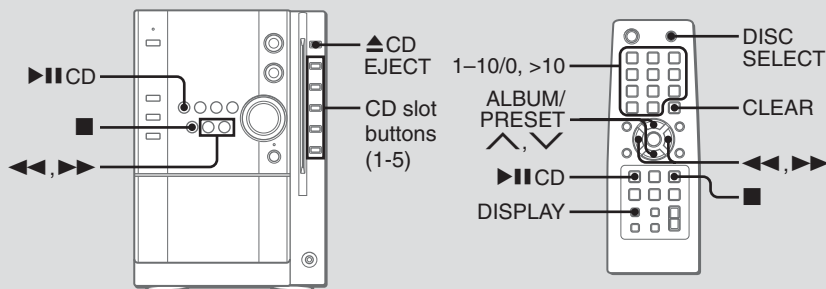
Please carry out procedures below to prevent the breakage of CD mechanism.

- 1 Eject all the CDs and the tapes.
- 2 Press POWER⏻STANDBY/ON (POWER on the remote) to turn the unit off.
- 3 Disconnect the AC power cord from the wall outlet.

Notes on CDs

- Do not tilt the unit with a disc inserted.
- Discs recorded on CD-R/RW drives may not be played back because of scratches, dirt, recording condition or the drive's characteristics.
- CD-R/RW discs which are not finalized at the end of recording cannot be played back.
- Do not load an unrecorded CD-R/RW disc. The disc may be damaged.

MP3-CD OPERATIONS



(when the album has less than 100 tracks)

- To select the 7th track, press 7.
- To select the 10th track, press 10/0.
- To select the 25th track, press >10, 2 and 5.

(when the album has more than 99 tracks)

- To select the 25th track, press >10, 10/0, 2 and 5.
- To select the 100th track, press >10, 1, 10/0 and 10/0.
- To select the 147th track, press >10, 1, 4 and 7.

Auto resume playback

When you change the function from CD to another one, or turn the unit off, CD playback is interrupted.

The next time you set the function to CD, the track you interrupted playback will automatically start play from its beginning.

To perform Shuffle, Repeat and Programmed playback for MP3-CDs

The procedures of Shuffle, Repeat and Programmed playback for MP3-CDs are the same as those in "CD OPERATIONS". Follow the steps described there.

- In the album mode, only the track within a selected album can be selected and played.

To display the title of the album and track in the display

Press DISPLAY on the remote during playback.

The display changes in the following order:

- Track number being played and elapsed playing time
- Track(file) name and album name* being played
- Track title* and artist name* being played

* Album name, track title and artist name are not displayed if they are not registered.

To eject the disc

Press the desired CD slot buttons (1-5) to select the disc, then press ▲ CD EJECT.

Playback

This unit plays back MP3-CDs: discs recorded with MP3 tracks (files). Basic operations for MP3-CDs are mostly the same as those in "CD OPERATIONS". Before playing an MP3-CD, also refer to "Descriptions of MP3" for the details of MP3.

Switching between the disc mode and the album mode

Hold down SHIFT and press DISC/ALBUM on the remote.

In disc mode, there will be no indication in the display.

In the album mode, "ALBM" lights up in the display.

In the disc mode, all the tracks on the disc can be played.

In the album mode, only the tracks within a selected album can be played.

1 Press CD and load disc(s).

Press the CD slot buttons (1-5) and insert a disc with the labeled side right.

To insert more discs, press CD slot buttons (1-5) so that the slot changes, then insert a disc.

After reading the loaded disc, "CD" lights up at the corresponding disc number (1-5) in the display.

Do not insert a disc forcibly.

2 To play all discs, press ►► CD.

To play one desired disc, press the desired CD slot buttons (1-5).

Playback starts from the first track, and the elapsed playback time is displayed.

In the album mode, playback starts from the first track of the first album and it will stop when reaching the end of the last track of the album.

To stop playback

Press ■.

To select an album

Press PRESET/ALBUM ^ or v on the remote.

To select a track

Press ◀◀ or ▶▶ repeatedly.

To select a disc and a track on the remote

To select a disc

Press DISC SELECT, then press the numbered button (1-5) within 6 seconds.

To select a track

Press the numbered buttons in the following way to select a track.

Descriptions of MP3

An MP3 file stores audio data compressed using MPEG1/2, the audio layer-3 file-coding scheme.

In this manual, CDs, CD-R discs and CD-RW discs are all referred to as "discs". We refer to what are called "folder" and "file" in PC terminology as "album" and "track".

Notes on playing MP3 files

- An MP3 track must be recorded on a disc in the format compliant with ISO 9660. Note, however, that the unit may not play tracks in the order they were recorded.
- The maximum allowable number of tracks and albums in a disc are as follows:
 - number of tracks: 255
 - number of albums: 255
- The maximum allowable depth of nested albums is 8.
- It may take 30 seconds or more before the unit can start play of MP3 tracks, depending on the number of recorded tracks and the complexity of the album tree.
- The unit cannot play MP3 tracks recorded using a packet writing utility.
- The unit can play MP3 tracks having a file extension ".mp3".
- If you play a non-MP3 track that has the ".mp3" file extension, you may hear some noise.

Notes on display indications during play

- Up to 8 characters are displayed for the title of an album or a track. If ID3TAG version 1.X was applied to record additional information for an MP3 track, up to 10 characters showing track title is displayed. However, if information of ID3TAG version 2.X are also recorded in the same MP3 track, the track title of ID3TAG is not displayed. Characters other than uppercase letters ("A" to "Z") and numerals ("0" to "9") may not be displayed correctly.
- The elapsed playing time may not be displayed correctly for MP3 tracks.

Terminology

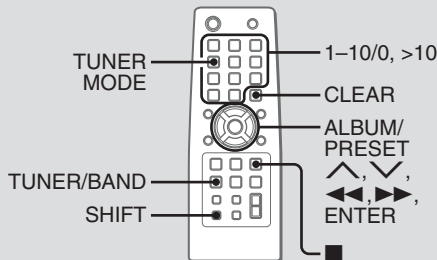
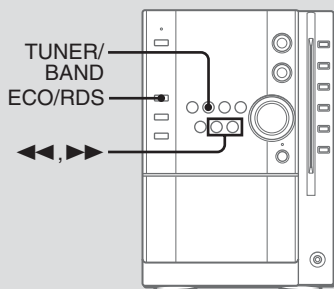
- **ISO 9660**
ISO stands for the "International Organization for Standardization". ISO 9660 determines the file structure for the CD-ROMs. This unit can play MP3 files recorded in the format compliant with ISO 9660.
- **Nesting of folders (albums)**
To organize data files stored in a PC, you can store related files in a folder. A folder can contain other folders as well as files. For example, folder A can contain folder B, and folder B can contain folder C; this is called "nesting of folders". The maximum depth of nested folders, allowed by ISO 9660, is 8.
- **Writing utilities**
There are 3 utilities used to record data on a disc.
 1. **DAO (Disc At Once) utility**
All data to be written must be prepared in advance and written onto a disc from the beginning to the end in one operation. No data can be added to a disc on which data were already written with DAO utility.
 2. **TAO (Track At Once) utility**
Data are written onto a disc track by track. Data can be added to a disc on which data were written with TAO utility.
 3. **Packet writing utility**
Tracks are divided into smaller pieces while being recorded, depending on the size of available spaces on the disc. Data can be added to a disc on which data were written with packet writing utility.
This unit can play MP3 discs recorded using DAO and TAO utilities.
- **ID3TAG**
ID3TAG determines the data format for the text to be added to an MP3 file, mainly used to indicate a track title or an artist's name, etc.

Notes on creating MP3 discs

- **When converting audio data to MP3**
The unit supports MP3 files with a sampling frequency of 16, 22.05, 24, 32, 44.1 or 48 kHz.
To enjoy high sound quality, we recommend storing MP3 files with a sampling frequency of 44.1 kHz and a fixed bit rate of 128 kbps. The assured bit rate range for sound quality on the unit is 8 kbps to 320 kbps. If an MP3 file stored with a bit rate beyond that range is played back, sound quality is not guaranteed and noise may be generated.
- **When creating MP3 discs**
Do not store more than 255 albums in a disc. Also, keep the total number of albums and tracks 255 or less in a disc.
- **To play tracks in the order they were recorded**
 1. Use a writing software capable of recording MP3 tracks (files) in numerical and alphabetical order. For details on using the software, refer to the operating instructions supplied with the software.
 2. Use only one album. (Do not create a sub-album within an album.)
 3. Include a two- or three- digit number at the beginning of each album or track name so that the albums and tracks are played in order.
<example of recommended names>
01XXXXX.mp3
02XXXXX.mp3
03XXXXX.mp3
04XXXXX.mp3
05XXXXX.mp3
<example of names not recommended>
1XXXXX.mp3
5XXXXX.mp3
10XXXXX.mp3
15XXXXX.mp3
20XXXXX.mp3
(Numbers at the beginning have different digit number. The tracks will not be played in this order but played in the order of "1", "10", "15", "20" and "5".)

TUNER OPERATIONS

En



Manual tuning

- 1 Press TUNER/BAND repeatedly to select a band. The unit switches to the tuner from any other function and alternates between FM and AM.
- 2 Press ◀◀ or ▶▶ repeatedly to tune in a station. "TUNE" is displayed when a station is tuned in. "(((Ⓜ)))" is displayed for FM stereo reception.

To search for a station automatically (Auto search)

Hold down ◀◀ or ▶▶.

The unit searches for a station and stops at reception.

To stop the search manually, press ◀◀ or ▶▶.

- Auto search may not stop at stations with weak signals.

Preset tuning

Preset your favourite stations by either of the following ways ("Manual presetting" or "Automatic presetting") and tune them in directly by using preset numbers.

Manual presetting

- 1 Tune in the desired station.
 - 2 Press ENTER on the remote to store the station. The preset number, beginning from "1" appears in the display.
 - 3 Repeat steps 1 and 2 to preset other stations. The next station will not be stored if a total of 32 preset stations have already been stored. ("Full" is displayed.)
- If power is interrupted for more than approximately 12 hours, all settings stored in memory after purchase need to be reset.



Automatic presetting

Scans the receivable frequency range and stores tuned stations automatically with the preset number.

- 1 Press TUNER/BAND.
- 2 Hold down ECO/RDS for 2 seconds until "AUTO PRESET" scrolls in the display.
- 3 Press ECO/RDS on the unit or ENTER on the remote. If ECO/RDS or ENTER is not pressed within 6 seconds, automatic presetting is not activated. The tuning indicator is displayed and scanning begins with the FM band. The frequency and the preset number (beginning from 1) will be displayed when a tuned station is stored. The display will return to the first stored station when scanning is finished.

- The unit scans the AM bands if preset numbers are still available.
- Automatic presetting clears all the previously stored preset stations.
- If identical RDS stations with alternative frequencies are detected, only the station with the stronger signal is stored.

Tuning in preset stations

- 1 Select the band.
- 2 Press ALBUM/PRESET ,  on the remote repeatedly.
With each press, the station with the succeeding or preceding preset number is tuned in.
You can tune in the desired preset station directly by pressing the numbered buttons on the remote.
 - To select preset number 7, press 7.
 - To select preset number 12, press >10, 1 and 2.

To clear a preset station

- 1 Tune in the station by preset tuning.
- 2 Press CLEAR, then press ENTER on the remote within 6 seconds.
Preset station numbers in the band which are higher than the cleared number decrease by one.

Adjustments

To switch to monaural FM reception

Hold down SHIFT and press TUNER MODE on the remote so that "TUNER MONO" is displayed.

To cancel, repeat the above so that "AutoSTEREO" is displayed.

Tip:

When FM stereo reception is poor, switching to monaural reduces noise.

RDS features

RDS (Radio Data System) is a broadcasting service which allows FM stations to send additional information along with the regular radio signal.

The additional information is derived from the features of RDS described below.

Program Service station name (PS)

The station name is displayed automatically when an RDS station is tuned in.

Radio Text (RT)

You can show text information such as the title of a song on the display.

Press ECO/RDS repeatedly when tuning in to an RDS station.

If the tuned station is not transmitting text information, "NO RT" will be displayed.

To return to the regular display

Press ECO/RDS again.

Program Type (PTY)

This is an identification to specify the program being broadcast currently.

Press ECO/RDS repeatedly to display a program type when tuning in to an RDS station.

The program type will be displayed for 6 seconds.

If no PTY data or undefined PTY data is being transmitted, "NO PTY" or "UNDEFINE" will be displayed.

The following PTYs can be received on the unit

*TRAFFIC, NEWS, AFFAIRS, INFO, SPORT, EDUCATE, DRAMA, CULTURE, SCIENCE, VARIED, POP M, ROCK M, EASY M (easy listening music), LIGHT M (light classical music), CLASSICS, OTHER M (other music), WEATHER, FINANCE, CHILDREN (children's program), SOCIAL (social affairs), RELIGION, PHONE IN, TRAVEL, LEISURE, JAZZ, COUNTRY (country music), NATION M (national music), OLDIES, FOLK M, DOCUMENT, TEST (alarm test), ALARM.

*The unit identifies TRAFFIC with one of the PTYs.

PTY Search

The unit can search for a station broadcasting your desired PTY easily. To do so, you need to preset every available station in advance since the unit searches only the preset stations.

- 1 Press ECO/RDS repeatedly until the program type of the currently tuned station is displayed.
- 2 Press ◀◀ or ▶▶ to select a desired program type and then press ECO/RDS on the unit or ENTER on the remote.

The search begins, stops when a suitable station is detected, and the unit tunes it in.

"NOT FOUND" is displayed if a suitable station is not found, and the unit returns to the previous station.

If there is no button input for 6 seconds in step 2, the search is not activated.

Tip:

If TRAFFIC is selected, the unit searches for a station which regularly broadcasts traffic announcements. Therefore, a detected station may not be currently broadcasting traffic announcements. You will, however, be able to hear the announcements in a while.

INFO Search

The unit can leap to a station which has just started broadcasting your desired PTY.

In INFO Search, the unit is in standby mode until the desired PTY begins. As soon as it begins, the unit "leaps to" another station with the PTY and returns to the previously tuned station when it ends. INFO Search makes the function above possible with the help of INFO which gives the receivers a cross reference to other stations. You need to preset every available station in advance since the unit searches only the preset stations.

- 1 Tune in an RDS station.
If "INFO" lights up, proceed to the next step.
If not, try to tune in another RDS station until it does.
- 2 Press ECO/RDS repeatedly so that "INFO PTY" is displayed.
- 3 Press ◀◀ or ▶▶ to select a desired program type and then press ECO/RDS on the unit or ENTER on the remote.
"INFO ON" is displayed for 2 seconds and then the unit enters the standby mode while "INFO" flashes. When the unit leaps to another station, "INFO" flashes rapidly. If there is no button input for 6 seconds in step 3, the search is not activated.

To stay in the "leaped to" station

Press ■ on the remote. The standby mode for INFO Search is also cancelled.

To return to the previously tuned station from the "leaped to" station

Press ECO/RDS repeatedly so that "INFO PTY" and the specified PTY are displayed alternately. Then press ENTER on the remote.

To cancel the standby mode for INFO search

Press ECO/RDS repeatedly so that "INFO PTY" and the specified PTY are displayed alternately. Then press ■ on the remote.

- The standby mode for INFO Search will not be cancelled even if the unit is turned off.

Note on PTY & INFO Search

PTY & INFO Search do not function under the following conditions:

- FM stations are not preset.
- The signals of the station broadcasting the desired PTY are weak.
- FM RDS stations cannot be received.

Clock-time (CT)

You can automatically set and update the clock on the hour every hour just by tuning in an RDS station since RDS stations transmit clock signals.

- 1 Press ECO/RDS repeatedly to select "CT ON" while the unit is on and the time is displayed (see "Setting the clock").
- 2 Tune in an RDS station.

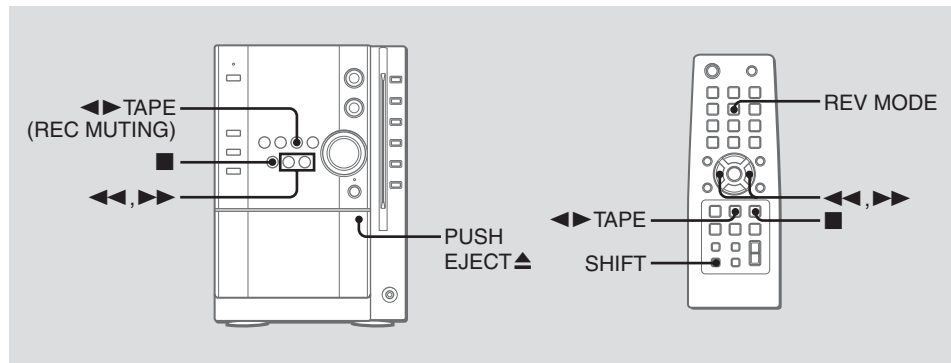
To deactivate CT function (If the clock is set wrongly due to an incorrect clock signal)

Repeat step 1 to select "CT OFF".

Note on RDS features

The RDS features described above may not function correctly if the RDS transmission data from the station contains too much interference or the reception signal is too weak.

TAPE PLAYBACK



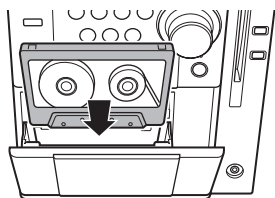
Notes on cassettes

- Use of a tape longer than 90 minutes is not recommended since they are extremely thin and easily damaged. If you should use it, do not change the tape operations such as play and stop frequently.
- Take up any slack in the tape with a pencil or similar tool before use. Slack tape may get entangled in the deck mechanism and become damaged.

Playback

Use only type I (normal) tapes.

- 1 Press PUSH EJECT ▲ to open the cassette holder.
- 2 Insert the tape.
Insert with the exposed side down, and press PUSH EJECT ▲ to close the cassette holder.



- 3 Press ◀▶ TAPE (REC MUTING) (◀▶ TAPE) to start play.

Reading the indicators

- ▶: The front side is being played (forward).
- ◀: The back side is being played (reverse).

To select a reverse mode

Hold down SHIFT and press REV MODE on the remote repeatedly.

The mode changes as follows;

"⎓": Plays one side only

"⎓": Plays from the front side to the back sides once.

"⎓": Plays both sides repeatedly

To stop playback

Press ■.

To change the playback side

Press ◀▶ TAPE (REC MUTING) (◀▶ TAPE) in playback mode.

To rewind or fast forward

Press ◀◀ or ▶▶.

To reset the tape counter

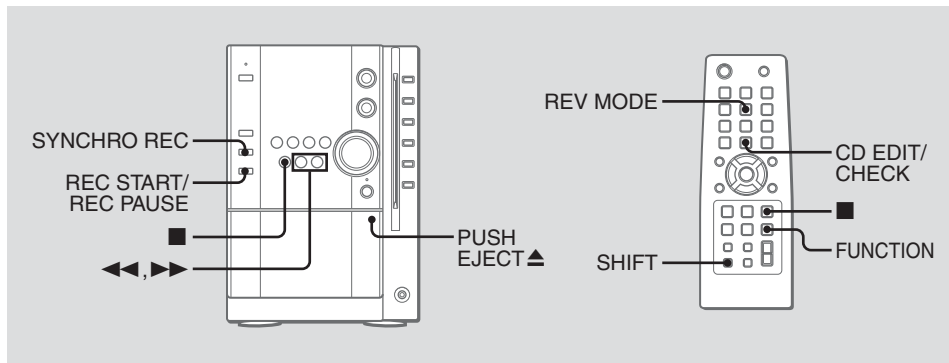
Press ■ in stop mode, and the tape counter in the display is reset to "0000".

Opening and closing the cassette holder will also reset the tape counter.

To eject the tape

Press PUSH EJECT ▲ after the deck stops completely.

TAPE RECORDING



To record a CD

Use only type I (normal) tapes.

- 1 Press PUSH EJECT to open the cassette holder.
- 2 Insert the recordable tape.
Insert with the exposed side down, and the side to be recorded on first facing out from the unit. Press PUSH EJECT to close the cassette holder.
- 3 Hold down SHIFT and press REV MODE on the remote repeatedly to select the reverse mode.
To record on one side only, select .
To record on both sides, select .
If selecting "" mode in this step, the reverse mode changes to "" when starting recording.
- 4 Press FUNCTION on the remote repeatedly to select the CD function, and load the disc.
To record only one track, start play of the track.

- 5 Press SYNCHRO REC.

The unit enters the recording pause mode, and "REC" indicator flashes on the display.

- 6 Press REC START/REC PAUSE to start recording. "REC MUTING" flashes in the display for 10 seconds and recording starts.
When only a track is to be recorded, CD playing returns to the beginning of the current track and recording starts.

- Volume or tone adjustment(s) (except i-Bass) does not affect recording.
- i-Bass tone adjustment does affect recording.
- "No Tab" is displayed if you attempt to record a tape with the tab broken off.

To record a selected set of tracks from a CD

Program the desired tracks (see "Programed play" on page 11) and then press SYNCHRO REC.

To record radio programs and external equipment

Use only type I (normal) tapes.

- 1 Press PUSH EJECT to open the cassette holder.
- 2 Insert the recordable tape.
- 3 Hold down SHIFT and press REV MODE on the remote repeatedly to select the reverse mode.
- 4 Prepare the source.
To record radio programs, press TUNER/BAND and tune in the desired station.
To record from connected external equipment, press AUX and prepare the equipment.
- 5 Press REC START/REC PAUSE twice to start recording.
When recording input from connected equipment, manually start playback of the source.
Recording from CDs can also be made in this way.
To do that, start the playback of the CD in step 4.

To stop recording

Press .

To pause recording (only for TUNER or AUX source)

Press REC START/REC PAUSE. Press again to resume.

To record a 4-second blank space (only for TUNER or AUX source)

Inserting 4-second blank spaces may help you locate the beginning of the track on other equipment with the "Music Sensor" function.

- 1 Press ◀▶ TAPE (REC MUTING) on the unit during recording or in recording pause mode.
"REC MUTING" flashes in the display for 4 seconds (a blank space is added) and then the unit enters recording pause mode.
- 2 Press REC START/REC PAUSE to resume recording.

To record a blank space shorter than 4 seconds, press ◀▶ TAPE (REC MUTING) again while "REC MUTING" flashes.

To record a blank space longer than 4 seconds, press ◀▶ TAPE (REC MUTING) again after the unit enters recording pause mode.

Each time the button is pressed, a 4-second blank space is added.

To erase a tape

- 1 Insert the tape. Set the tape to the desired point if needed.
- 2 Press AUX.
If optional equipment is connected to the AUX IN jacks, turn it off.
- 3 Press REC START/REC PAUSE twice.

Edited CD recording

AI Edit Recording

Preparation

Prepare a tape that is longer than the CD length.

When recording a whole CD, AI Edit Recording takes the length of your tape into account and rearranges the recording order of the tracks if necessary, so that no track is cut short at the end of the side.

(AI: Artificial Intelligence)

- Recording cannot start from a point halfway in the tape.
- AI Edit Recording cannot be used with MP3-CDs.
- AI Edit Recording cannot be used with discs containing more than 30 tracks.

- 1 Insert the recordable tape.
- 2 Press FUNCTION on the remote to select the CD function, and load disc(s).
- 3 Hold down SHIFT and press CD EDIT/CHECK on the remote in stop mode.
"AI EDIT" and "AI C--00" is displayed.
- 4 Press the desired CD slot buttons (1-5) to select a disc.
When using the remote, press DISC SELECT then press the numbered button (1-5) within 6 seconds.
- 5 Press the numbered buttons on the remote to enter the length of the recordable tape.
10 to 99 minutes can be specified.
- For a 60-minute tape press 6 and 10/0.
In a few seconds, the unit determines the tracks to be recorded for each side.
 - ◀◀ or ▶▶ can also be used to specify tape length.

- 6 Press REC START/REC PAUSE once to start recording.

The tape is rewound to the beginning of the side facing out from the unit, "REC MUTING" flashes on the display and the lead segment is played through for 10 seconds, and recording starts.

When recording on the side facing out from the unit (side A) finishes, recording on the opposite side (side B) starts.

Programmed Edit Recording

As you program the CD tracks to record, Programmed Edit Recording displays the remaining recording time for each side of the tape, so you can easily select a set of desired tracks within the length of your tape.

- Recording cannot start from a point halfway in the tape.
- Programmed Edit Recording cannot be used with MP3-CDs.
- You cannot program more than 30 tracks.
- You cannot program a track with a track number larger than 30.

- 1** Insert the recordable tape.
- 2** Press FUNCTION on the remote to select the CD function, and load disc(s).
- 3** Hold down SHIFT and press CD EDIT/CHECK twice on the remote in stop mode.
"PGM EDIT" and "PRGM C--00" is displayed.
- 4** Press the desired CD slot buttons (1-5) to select a disc.
When using the remote, press DISC SELECT then press the numbered button (1-5) within 6 seconds.
- 5** Press the numbered buttons on the remote to enter the length of the recordable tape.
10 to 99 minutes can be specified.
 - For a 60-minute tape press 6 and 10/0.
 - ◀◀ or ▶▶ can also be used to specify tape length.
- 6** Press the numbered buttons on the remote to select the first track to be recorded on side A.
 - To select the 25th track, press >10, 2 and 5.
 - To select the 11th track, press >10, 1 and 1.

- 7** Repeat step 6 to select the rest of the tracks for side A.

The remaining recording time of side A is displayed. You cannot select a track with a longer playing time.

- 8** Hold down SHIFT and press CD EDIT/CHECK on the remote to switch to side B and select the tracks for the side.

- 9** Repeat step 6 to select the tracks for side B.

- 10** Press REC START/REC PAUSE once to start recording.

The tape is rewound to the beginning of the side facing out from the unit, "REC MUTING" flashes on the display and the lead segment is played through for 10 seconds, and recording starts.

When recording on the side facing out from the unit (side A) finishes, recording on the opposite side (side B) starts.

To stop recording

Press ■. Recording and CD playback stop simultaneously.

To check the program

- 1 Before recording, hold down SHIFT and press CD EDIT/CHECK on the remote to select side A or B.
- 2 Press ◀◀ or ▶▶ repeatedly. The track number and program number are displayed in succession.

To change the program of each side

Hold down SHIFT and press CD EDIT/CHECK on the remote to select side A or B, and press ■ to clear the program for the selected side. Then, select tracks again.

To clear the edit program

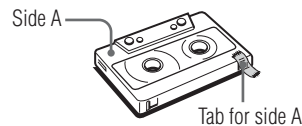
Press ■ twice.

Notes on AI / Programmed Edit Recording

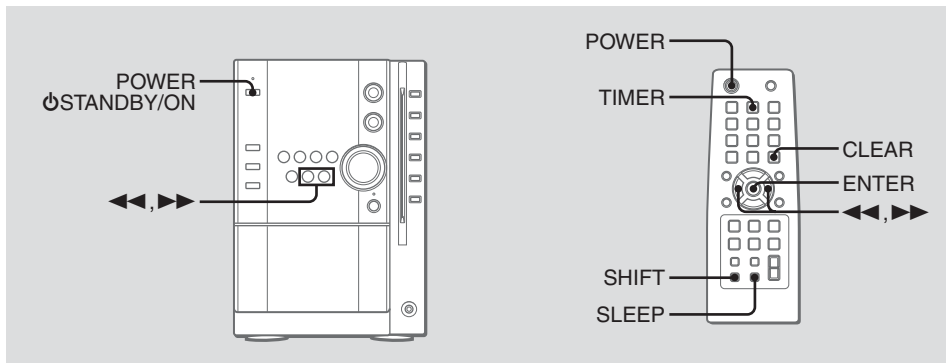
MP3-CDs cannot be used for AI / Programmed Edit Recording.

To prevent accidental erasure

Remove the plastic tab of the cassette tape with a screwdriver or other pointed tool. To record on the tape again, cover the detection slot with adhesive tape.



TIMER OPERATIONS



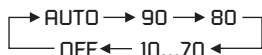
Sleep timer

Turns off the unit automatically after a specified time.

Press SLEEP on the remote.

"SLEEP" flashes in the display.

With each press, the timer duration changes as follows:



If you set to "AUTO", the unit turns off automatically when the current CD or tape finishes playback or elapsed 100 minutes.

To check the remaining time until the unit turns off

Press SLEEP on the remote. The remaining time is displayed for 6 seconds.

To cancel the sleep timer

Press SLEEP on the remote repeatedly so that "OFF" is displayed.

Timer playback

Turns on the unit at a specified time for the specified duration.

Make sure the clock is set correctly.

- 1 Press VOLUME +, - to set the volume level.
- 2 Hold down SHIFT and press TIMER on the remote repeatedly so that "Ⓢ" and "TIMER PLAY" is displayed.
- 3 Within 6 seconds, press ENTER.
"ON TIME" is displayed.
- 4 Press << or >> to set the timer start hour, and press ENTER.
- 5 Press << or >> to set the minute, and press ENTER.
"OFF TIME" is displayed.
- 6 Set the time to stop playback by following the same procedures as steps 4 and 5.

7 Press << or >> to select the source (CD, TAPE and TUNER), and press ENTER.

8 Prepare the source.

To play CD, load disc(s).

To play a tape, insert the tape.

To play the radio, select the band and tune in the desired station.

9 Press POWER STANDBY/ON (POWER) to turn the unit off.

"Ⓢ" remains in the display to indicate the timer standby mode (when ECO mode is deactivated).

At timer-on time, the unit turns on and plays the selected source. After the specified timer-activated duration, the unit turns off again.

- To stop timer setting in steps 4 to 6, press CLEAR. Timer standby mode is also cancelled.
- The timer playback is not activated when the clock is not set. ("SET NG" is displayed.)
- Timer playback will not begin unless the unit is turned off first.
- Timer playback for AUX function is not possible.

En

Timer recording

Timer recording is available only for TUNER sources.

- 1 Prepare the recording destination.
Insert the recordable tape in tape deck.
- 2 Hold down SHIFT and press REV MODE on the remote to select a reverse mode.
To record on one side only, select \llcorner .
To record on both sides, select \lrcorner .
If selecting " \llcorner " mode in this step, the reverse mode changes to " \lrcorner " when starting recording.
- 3 Hold down SHIFT and press TIMER on the remote repeatedly so that "Ⓞ" and "TIMER REC" are displayed.
- 4 Within 6 seconds, press ENTER.
"ON TIME" is displayed.
- 5 Press \lll or \llr to set the timer start hour, and press ENTER.
- 6 Press \lll or \llr to set the minute, and press ENTER.
"OFF TIME" is displayed.
- 7 Set the time to stop playback following the same procedure as steps 5 and 6.
- 8 Select the band and tune in the desired station.
- 9 Insert a recordable tape and then turn the unit off.
"Ⓞ" remains in the display to indicate the timer standby mode (when ECO mode is deactivated).
At timer-on time, the unit turns on and records the selected source. After the specified timer-activated duration, the unit turns off again.

- To stop timer setting in steps 3 to 6, press CLEAR.
Timer standby mode is also cancelled.
- The timer recording is not activated when the clock is not set. ("SET NG" is displayed.)
- The timer recording will not begin unless the unit is turned off first.

To check the timer setting

Hold down SHIFT and press TIMER on the remote repeatedly so that "TIMER PLAY" or "TIMER REC" appears in the display.

The timer-on time, the time to stop playback and the source are displayed for 6 seconds.

To change the timer setting

Reset the timer again.

To cancel the timer

Hold down SHIFT and press TIMER on the remote repeatedly until "TIMER OFF" is displayed. "Ⓞ" and "TIMER REC" disappear from the display.

Tip:

Your timer setting is retained even if the timer is cancelled. Next time the timer is activated, you can change your previous setting, or simply use the same setting again.

Notes

- The timer playback performs every day at the specified time unless you cancel it.
- You cannot set the same time for timer-on time and timer-off time. "SET NG" is displayed if you do that. In this case, reset the time.
- The timer playback will not begin unless the unit is turned off first.

REFERENCE

Care and maintenance

Occasional care and maintenance of the unit and the software are needed to optimize the performance of your unit.

To clean the cabinet

Use a soft and dry cloth. If the unit surfaces are extremely dirty, use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents such as alcohol, benzine or thinner.

To clean the tape heads

Dirty tape heads cause sound deterioration. After every 10 hours of use, clean the tape heads by using a commercially available dry-type or wet-type head cleaning cassette separately. Refer to the instructions of the cleaning cassette.

To demagnetize the tape heads

Use a demagnetizing cassette after every 20 to 30 hours of use. Refer to the instructions of the demagnetizing cassette.

Care of CDs

When a CD becomes dirty, wipe it from the centre out with a cleaning cloth. Please do not use solvents. After playing a CD, store it in its case. Do not expose a CD to direct sunlight or heat sources.

Care of tapes

Store tapes in their cases after use. Do not leave tapes near magnets, motors, television sets, or any source of magnetism. Do not expose tapes to direct sunlight, or leave them in a car parked in direct sunlight.

Troubleshooting

If your unit fails to perform properly, check the following guide and the relevant sections of the Operating Instructions.

First check that the AC power cord and the speakers are connected correctly and firmly.

Should any problem persist, consult your nearest Aiwa dealer.

General

There is no sound

- Are the speakers and AC power cord connected properly?
- Turn VOLUME clockwise and hold.
- The headphones are connected.
- Insert only the stripped portion on the speaker cord into the SPEAKERS terminal. Inserting the vinyl portion of the speaker cord will obstruct the speaker connections.

The unit shut off suddenly

- Possibly a short circuit in the speaker terminals. Disconnect the AC power cord from the AC power socket and reconnect the speaker cords correctly.

The display blacks out when the unit is turned off.

- ECO is mode set to on. (see "ECO mode" on page 8)

Erroneous display

- Reset the unit. (See "Resetting the unit" on page 24.)

There is severe hum or noise.

- A TV or VCR is placed too close to the stereo system. Move the stereo system away from the TV or VCR.

The clock indication does not show the correct time.

- A power interruption occurred. Set the clock and timer settings again.

The clock setting/radio presetting/timer is cancelled.

- The AC power cord is disconnected or a power failure occurs longer than half a day.
Redo the following:
 - "Setting the clock" on page 8
 - "Preset tuning" on page 14If you have set the timer, also redo "Timer playback/recording" on page 21 and 22.

The timer does not function.

- Set the clock correctly.

The remote does not function.

- There is an obstacle between the remote and the unit.
- The remote is not pointing in the direction of the unit's sensor.
- The batteries have run down. Replace the batteries.

Tuner

Poor radio reception

- Check antenna connection. Adjust the antenna to find the best reception.
- For FM, move the FM antenna to reduce the noise.
- For AM, re-rotate the AM antenna to reduce the noise.
- Move the unit and antenna away from other electric appliances and cords.

CD player

The sound drops out.

- The lens is dirty. Clean it with a commercially available blower.

The CD does not play.

- The CD is not lying flat in the disc compartment.
- The CD is dirty.
- The CD is inserted label side down.
- Moisture condensation has built up. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.

Tape deck

The tape does not record.

- No tape in the deck.
- The tab has been removed from the cassette tape.
- The tape has reeled to the end.

The tape does not record nor play or there is decrease in sound level.

- The heads are dirty. Clean them (see "To clean the tape heads" on page 23).
- The record/playback heads are magnetized. Demagnetize them (see "To demagnetize the tape heads" on page 23).

The tape does not erase completely.

- The record/playback heads are magnetized. Demagnetize them (see "To demagnetize the tape heads" on page 23).

There is excessive wow or flutter, or the sound drops out.

- The capstans or pinch rollers are dirty. Clean them (see "To clean the tape heads" on page 23).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetized. Demagnetize them (see "To demagnetize the tape heads" on page 23).

Poor tape sound.

- Use TYPE I (normal) tapes.

Speakers

Sound comes from one channel or unbalanced left and right volume occurs.

- Check the speaker connection and speaker placement.

Sound lacks bass.

- Check that the speaker's ⊕ and ⊖ terminals are connected correctly.

Resetting the unit

If an unusual condition occurs in the display window or the cassette deck, reset the unit as follows:

1 Press POWER to turn off the power.

If the power cannot be turned off, disconnect the AC power cord, then plug it in again.

2 Hold down ■ and press POWER on the main unit.

Everything stored in memory after purchase is cleared.

Specifications

MAIN UNIT CX-LMN5

TUNER

FM tuning range	87.5 MHz to 108 MHz
FM usable sensitivity (IHF)	16.8 dBf
FM antenna terminal	75 Ω (unbalanced)
AM tuning range	531 kHz to 1602 kHz
AM usable sensitivity	350 μ V/m
AM antenna	Loop antenna

AMPLIFIER

Power output	Rated: 64 W + 64 W (6 Ω , T.H.D. 1 %, 1 kHz/DIN 45500) Reference: 80 W + 80 W (6 Ω , T.H.D. 10 %, 1 kHz/DIN 45324)
Input	AUX IN: 1.4 V
Outputs	SPEAKERS: 6 Ω or more PHONES: 32 Ω or more

CASSETTE DECK

Track format	4 tracks, 2 channels stereo
Frequency response	100 Hz – 10000 Hz
Recording system	AC bias
Heads	Recording/playback \times 1, erase \times 1

CD PLAYER

Laser	Semiconductor laser ($\lambda = 800$ nm) Emission duration: continuous
D/A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

SPEAKER SYSTEM SX-LMN5

Speakers system	2 way, Bass-reflex type (magnetic shielded)
Speaker units	Woofer: 140 mm cone type Tweeter: 25 mm dome type
Nominal Impedance	6 Ω
Dimensions (w/h/d)	Approx. 200 \times 277 \times 279 mm
Mass	Approx. 3.6 kg net per speaker

GENERAL

Power requirements	230 V AC, 50/60 Hz
Power consumption	85 W
Power consumption in standby mode	with ECO mode on: 0.26 W with ECO mode off: 15 W
Dimensions (w/h/d)	Approx. 190 \times 277 \times 353 mm
Mass	Approx. 6.8 kg
Supplied accessories:	FM antenna (1) AM antenna (1) Speaker cords (2) Remote commander (1) Batteries (2)

Specifications and external appearance are subject to change without notice.

COPYRIGHT

Check copyright laws relevant to recordings from discs, radio or tape for the country where the unit is to be used.

Licensed by BBE Sound, Inc. under USP4638258, 5510752 and 5736897.

